

**FLEXIBLE BUFFERING SCHEME FOR MULTI-RATE SIMD
PROCESSOR**

ABSTRACT OF THE DISCLOSURE

A single instruction, multiple data (SIMD) architecture for controlling the
5 processing of plurality of data streams in a digital subscriber line (DSL) system has a
memory for storing the data from the channels, a processor operatively coupled with the
memory for processing data from the data streams, and a controller for controlling the
processor. Storing the data in the memory de-couples the operating rate of the processor and
the operating rate of the data streams.

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